

FIRST DAY

Purpose: Introductory Planning on WS-117L Test Activities at AFMTC.

<u>TIME</u>	<u>LOCATION</u>	<u>ITEM</u>
1000	Room 345 Bldg 425	1. Briefing by L/C Riepe. a. Combined Test Plans. b. Schedules. c. Objectives. d. Technical description of WS-117L as involved with Thor and Atlas. 2. Briefing by L/C Green. a. Relationship of WS-117L & WS-315A. 3. Briefing by Maj Thornton. a. Relation of WS-117L & WS-107A-1. b. Proposed augmentation of WS-107A-1 to assure fulfillment of its original objectives considering timing of WS-117L integration. 4. Discussion aimed at conclusions on relationship of LMSD, Douglas and Convair. a. Planning. b. Operations. c. Coordination. d. Responsibility channels. e. Flight test working group. f. Test Data reduction. g. Analysis and dissemination. 5. Determination of Interrelating responsibilities of WDGMI or WDGMC and WDGMR prior to, during and after combined test. 6. Establishment of Hangar, Pad and Base Operations procedures. 7. "In-House" discussion on Base Instrumentation and Range Safety Requirements.

DOWNGRADED AT 12 YEAR
INTERVALS; NOT AUTOMATICALLY
DECLASSIFIED. DOD DIR 5200.10

Cy 3 of 56 cys

MT-58-2660

Agenda for 117L Meeting Cont'd

SECOND DAY

1. Base Instrumentation.
2. Range Safety requirements
3. Logistical support of test operations.
4. Modifications to WS-315A and WS-107A-1 launch facilities.
5. Definition of specific responsibilities for facility modifications - launch modifications.
 - a. Umbilical mast.
 - b. Service gantry.
 - c. Instrumentation cabling.
 - d. Instrumentation transfer unit.
 - e. Blockhouse instrumentation and space.
 - f. Propellant storage and transfer equipment and other service vehicles and appropriate locations.
 - g. Service plumbing.
 - h. Schedules for accomplishing and integrating (above items).

FACILITIES SCHEDULE

1. Hangar "E" - ^{July} ~~1958~~ 58 (BOD)

Joint Occupancy - ^{possible as early as March} ~~April~~ 1958 (Critical)

LAC Interior - March 1958 (Criteria)

✓ 2. 17A Modifications by Corps of Engineers - Aug 58 (BOD)

Power details - Feb 58 (Criteria) ^{No add. power required}

Umbilical siting & footings - Feb 58 (Criteria) ^{LAC-DAC TO modify thor umbilical}

Distribution details - Feb 58 (Criteria)

Hangways for GSE piping - Feb 58 (Criteria) ^{No Hangways required.}

3. 17A Modifications by LAC - Aug 58 (BOD) ^{"Able" mods. will fulfill 117L requirements except for work platforms.}

Gantry Modifications - Feb 58 (Criteria)

Umbilical Modifications - Feb 58 (Criteria)

Vehicle, Power, piping - Feb 58 (Criteria)

14 Modifications by Corps of Engineers - Feb 59 (BOD)

Power details - ^{March 58} ~~May~~ 58 (Criteria) ^(Possible no add. material required)

Distribution details - ^{May 58} ~~May~~ 58 (Criteria) ^(CVAC-LAC to determine cost.)

Hangways for GSE piping - May 58 (Criteria)

5. 14 Modifications by LAC - Feb 59 (BOD)

Gantry details - ^{Feb 58} ~~May~~ 58 (Criteria)

(Umbilical details - ^{Feb 58} ~~May~~ 58 (Criteria))

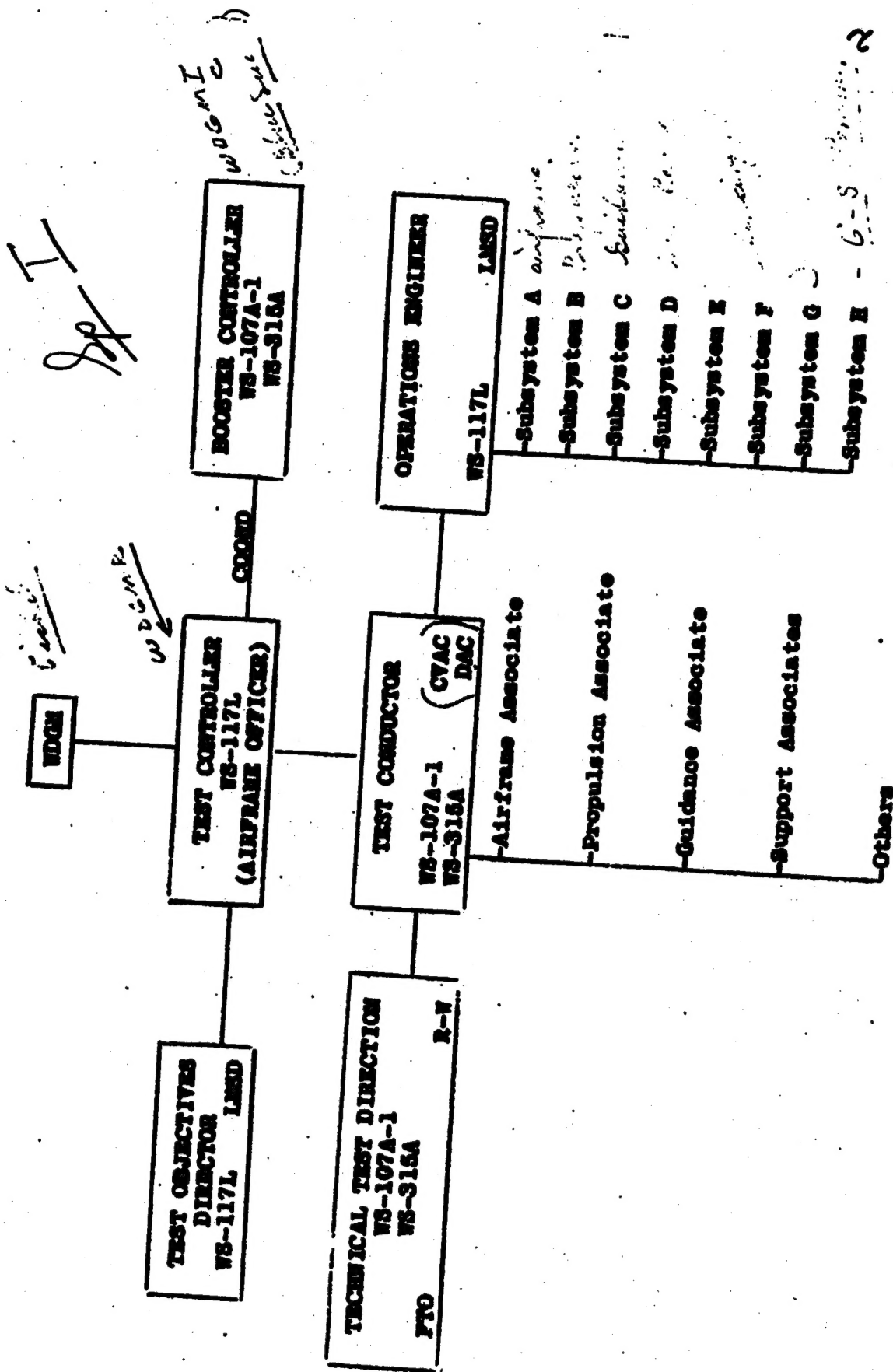
Vehicle, Power, piping - ^{Feb 58} ~~May~~ 58 (Criteria)

6. Downrange Modifications - ?

Feb 59
for begin
construction

Tie down

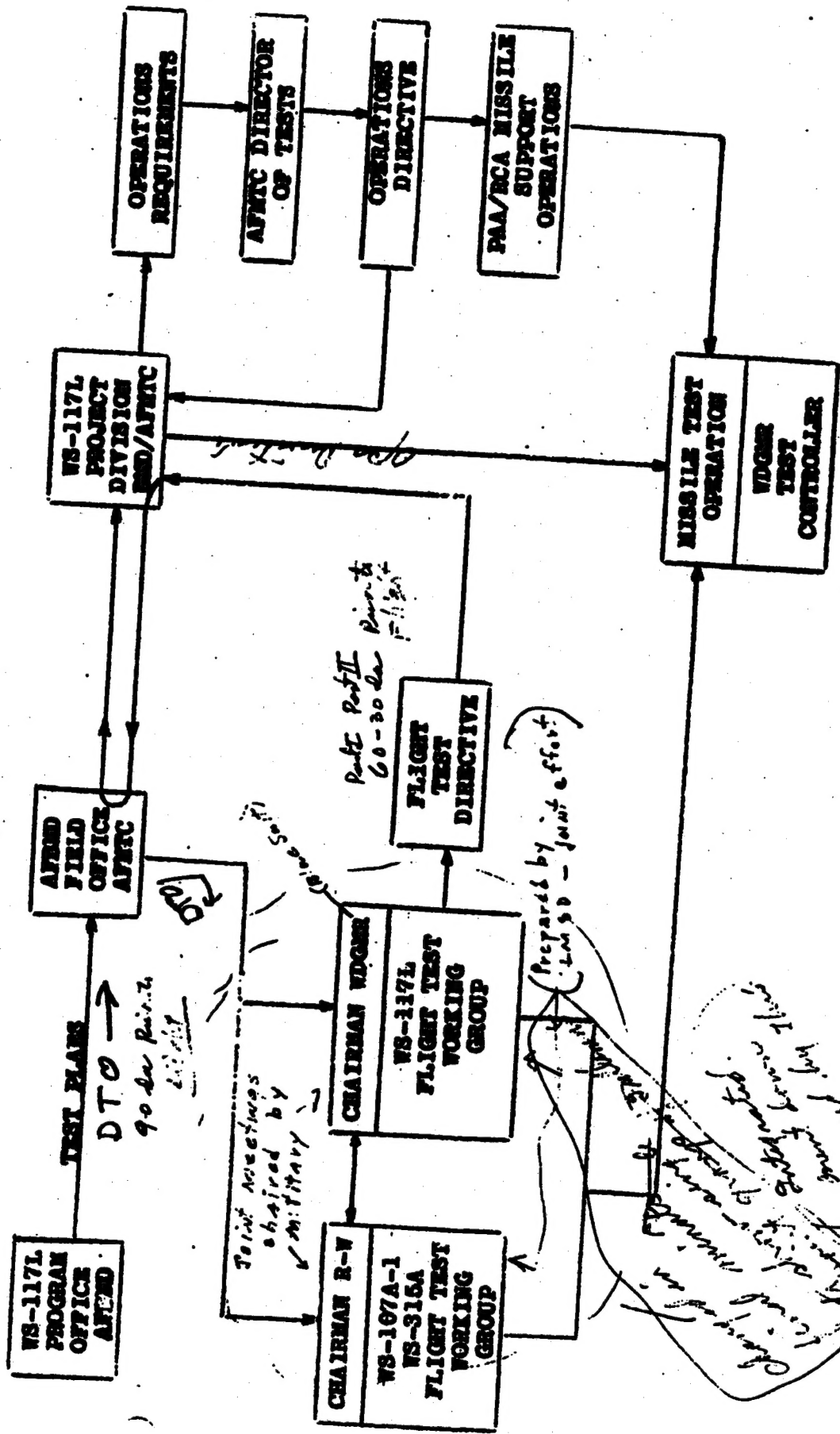
ORGANIZATION FOR WS-117L OPERATIONS AT AFMTC



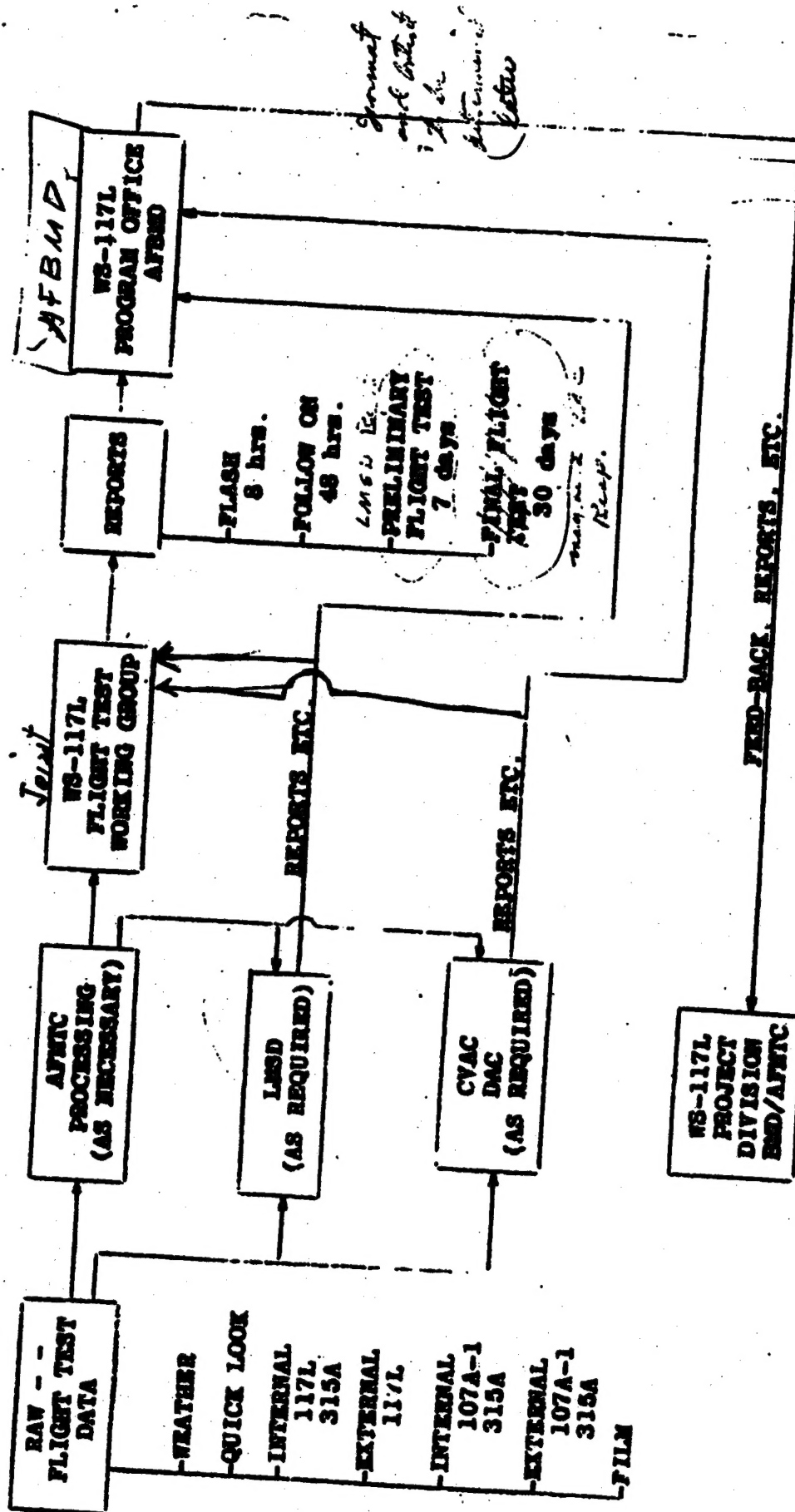
Eng.

2

ORGANIZATION FOR WS-117L FLIGHT TEST PLANNING AT AFMTC



WS-117L DATA HANDLING PROCESS - AFMTC OPERATIONS



UPGRADED AT 12 YEAR
INTERVALS; NO AUTOMATICALLY
DECLASSIFIED. DOD DIR 5200.10

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PROGRAM SCHEDULE

(*) START
(O) BOD
(X) OPERS, ACCELERATED PROGRAM
ARS, MS 117L

CRITICAL REQUIREMENTS

- 1 BOOSTER VEHICLES; Req'd at Test Site
- 2 Thor - (5) AFMTC, (5) Cooke
- 3 Atlas - (10) AFMTC, (71) Cooke
- 4 LAUNCH COMPLEXES:
- 5 AFMTC-Thor: RD (O) and Flights (X)
- 6 AFMTC-Atlas: RD (O) and Flights (X)
- 7 Cooke-Thor: RD (O) and Flights (X)
- 8 Cooke-Atlas: RD (O) and Flights (X) (New)
- 9 DATA ACQUISITION, TRACKING, & COMMAND STATION:
- 10 AFMTC-Antique: TLA/18 Mod 1, Complete
- 11 Cooke-TLA/18 and Command for:
- 12 Hawaii-TLA/18, UHF Track & Command. Radar
- 13 Alaska-UHF Track and Command. Radar
- 14 Cooke-Complete Station
- 15 Northwest & Northeast Sta. Complete
- 16 Central Sta. Complete

NEW SET ATLAS GSE REQ'D FOR COOKE

- 17 LAD SYSTEM TEST FACILITY
- 18 Component Test Lab Available
- 19 Test Stands 1 & 2 Available

MS 117L VEHICLE COMPLETION-FLIGHT & CAPTIVE

- 20 MS 117L MILESTONES: (Authority)
- 21 Functional Mockup Complete
- 22 Start Structural Tests
- 23 Install Engine in Flt. Veh. No. 1
- 24 Captive Veh. Hot Firings Begin
- 25 First Thor Flight-AFMTC
- 26 First Thor Flight-Cooke
- 27 First Atlas Flight-AFMTC
- 28 First Atlas Flight-Cooke

TRACK RADARS-REQ-1 (MFS-19) (3) REQ'D.

- 29 WIND TUNNEL TEST PRIORITY - THOR MS 117L
- 30 LITON ENVIROM. CHAMBER TESTS

Yellow

Doc# DTR 58-29

	CY58	FY59	CY59	FY60	CY60	FY61	CY61
1	J	F	M	A	M	J	J
2	J	F	M	A	M	J	J
3	J	F	M	A	M	J	J
4	J	F	M	A	M	J	J
5	J	F	M	A	M	J	J
6	J	F	M	A	M	J	J
7	J	F	M	A	M	J	J
8	J	F	M	A	M	J	J
9	J	F	M	A	M	J	J
10	J	F	M	A	M	J	J
11	J	F	M	A	M	J	J
12	J	F	M	A	M	J	J
13	J	F	M	A	M	J	J
14	J	F	M	A	M	J	J
15	J	F	M	A	M	J	J
16	J	F	M	A	M	J	J
17	J	F	M	A	M	J	J
18	J	F	M	A	M	J	J
19	J	F	M	A	M	J	J
20	J	F	M	A	M	J	J
21	J	F	M	A	M	J	J
22	J	F	M	A	M	J	J
23	J	F	M	A	M	J	J
24	J	F	M	A	M	J	J
25	J	F	M	A	M	J	J
26	J	F	M	A	M	J	J
27	J	F	M	A	M	J	J
28	J	F	M	A	M	J	J
29	J	F	M	A	M	J	J
30	J	F	M	A	M	J	J
31	J	F	M	A	M	J	J
32	J	F	M	A	M	J	J
33	J	F	M	A	M	J	J
34	J	F	M	A	M	J	J
35	J	F	M	A	M	J	J
36	J	F	M	A	M	J	J
37	J	F	M	A	M	J	J
38	J	F	M	A	M	J	J
39	J	F	M	A	M	J	J
40	J	F	M	A	M	J	J
41	J	F	M	A	M	J	J
42	J	F	M	A	M	J	J
43	J	F	M	A	M	J	J
44	J	F	M	A	M	J	J
45	J	F	M	A	M	J	J
46	J	F	M	A	M	J	J
47	J	F	M	A	M	J	J
48	J	F	M	A	M	J	J
49	J	F	M	A	M	J	J
50	J	F	M	A	M	J	J

CONFIDENTIAL

Application

(*) START (O) BOD (X) OPERS	ACCELERATED PROGRAM ARS, WS 117L	FY59	FY60	FY61
	CRITICAL REQUIREMENTS			
1	NEL ATLAS LAUNCH COMPLEX	J F M A M J J A S O N D J F M A M J J A S O N D	J F M A M J J A S O N D J F M A M J J A S O N D	J F M A M J J A S O N D
2	THOR PROTOTYPING SECTION			
3	TRAJECTORY CORPORATION			
4	AFMTC Flights - R-11 or SAC	X		
5	Cooke Flights - R-11 or SAC	X		
6	CAPTIVE TESTING			
7	Test Site Completion			
8	IASD MFG. HDO. & ENVIRON. CHAMBER			
9	SITE SELECTION -			
10	A. Hawaii	X		
11	B. Cooke - Launcher & DA & T Sta.	X		
12	C. Northwest & Northeast DA & T Stas.			
13	D. Central DA & T Sta.	X		
14	E. Alaska Track & Command Sta.			
15	SITE DEVELOPMENT & CONSTRUCTION			
16	A. Hawaii	*		
17	B. Cooke	*		
18	C. NW & NE Sta.			
19	D. Central Sta.			
20	E. Alaska			
21	F. Intelligence Center			
22	COOSE RANGE SAFETY			
23	SAC/HDOZ SUPPORT			
24	A. Thor - Cooke			
25	B. Atlas - Cooke			
26	C. Instrum. & Range Safety & Base Supp't.			
27	D. Communications			
28	INTER-STATION COMMUNICATIONS			
29	A. AFMTC to Cooke			
30	B. Hawaii to Cooke			
31	C. Alaska to Cooke			
32	D. NW, NE, and Central Sta. to Cooke			
33	E. Teletypes - AFMTC & IASD to Cooke			
34	RECOVERABLE PKG. RE-ENTRY TESTS - A/C			
35	LAUNCH COMPLEX MODIFICATIONS			
36	Thor - AFMTC			
37	Thor - Cooke			
38	Atlas - AFMTC			
39	TEST SUPPORT BILCS: AFMTC - HANGAR E			
40	COOSE - To Be Built			
41	TEST SUPPORT BILCS: AFMTC - HANGAR E			
42	COOSE - To Be Built			
43	TEST SUPPORT BILCS: AFMTC - HANGAR E			
44	COOSE - To Be Built			
45	TEST SUPPORT BILCS: AFMTC - HANGAR E			
46	COOSE - To Be Built			
47	TEST SUPPORT BILCS: AFMTC - HANGAR E			
48	COOSE - To Be Built			
49	TEST SUPPORT BILCS: AFMTC - HANGAR E			
50	COOSE - To Be Built			

PROGRAM SCHEDULE

ACCELERATED PROGRAM

ARS, WS 117L

CRITICAL DEVELOPMENT AREAS

1 SUBSYSTEM

1 A:

2

3

4

5 B:

6

7

8 C:

9

10 D:

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14 E:

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17 F:

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19 G:

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23 H:

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26 I:

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FY 59

CY 58

CY 59

FY 60

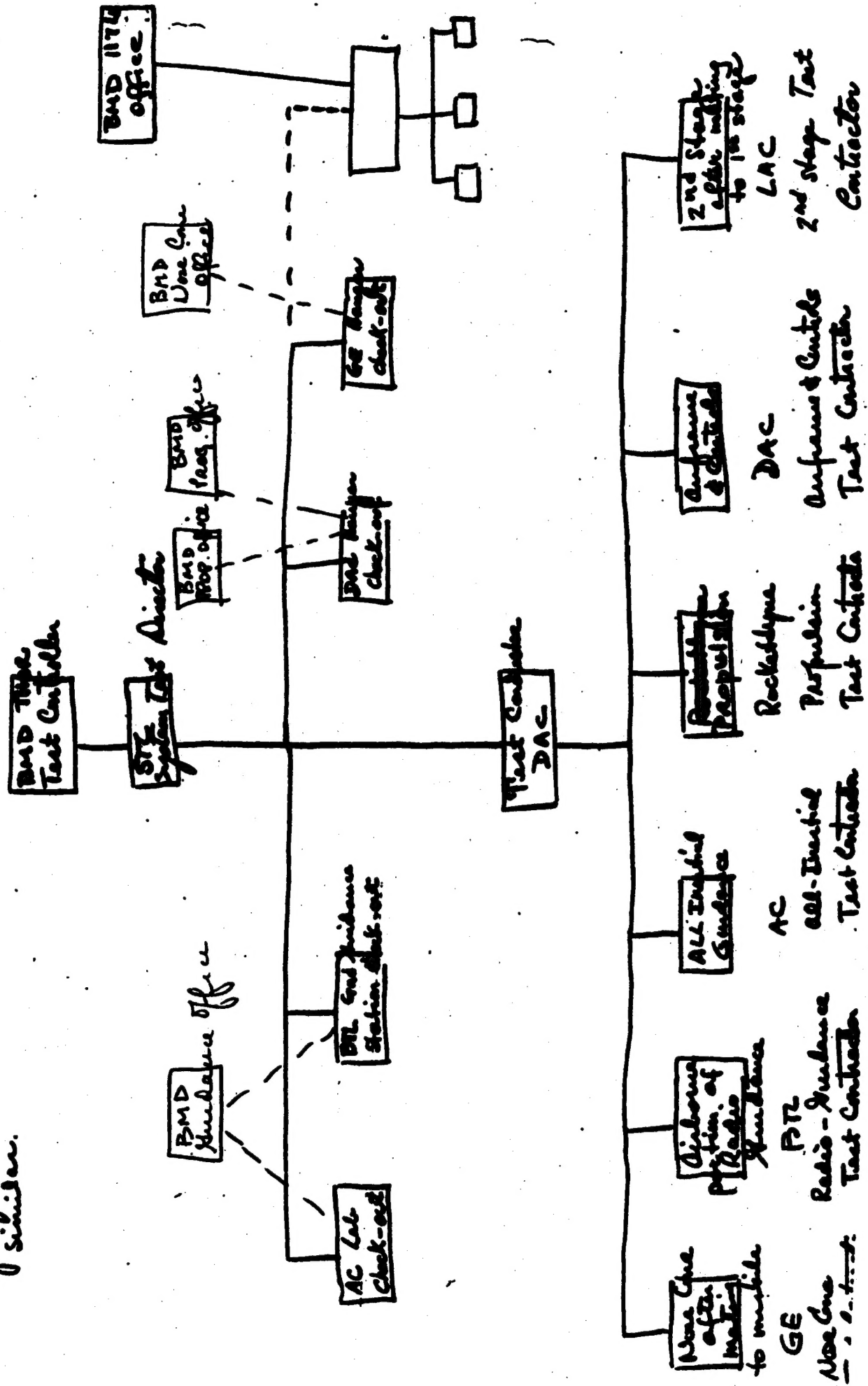
CY 60

FY 61

CY 61

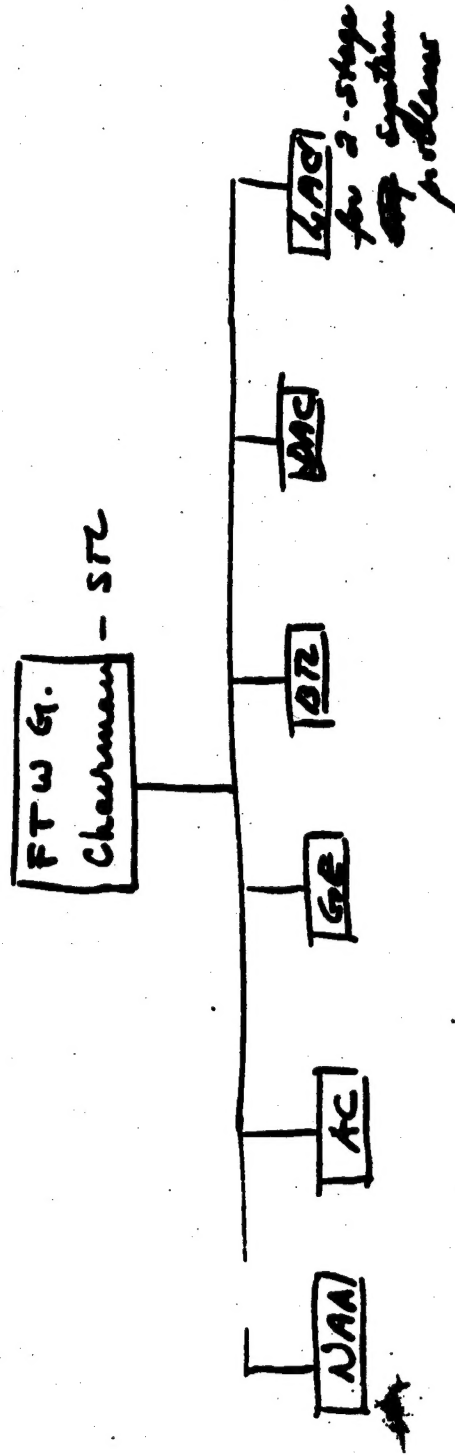
Thoe/117 Laming Oyang-ton

Note: Attackable launching
Encryption would be
similar.



FLT TST Working Group

1. Limit scope and charter of Flight Test Working Group to system problems that arise in planning and coordinating 2-stage launch operation.
2. Then only one FTWG necessary; whatever arrangements LAC makes to coordinate efforts of LAC sub-contractors can be considered in same light as arrangements which DAC makes to coordinate efforts of DAC sub-contractors. (We don't have another FTWG with DAS, Bendix, RCA, etc.)



General Points

1. We feel that it is very important to the basic Atlas, Titan, and Thor weapon programs, ^{that we} not ~~the~~ introduce an organizational arrangement which might disrupt the smooth working relationships between Test Controller, Test Director, & Test Conductor. We have worked almost 2 years to get where we are now; the next 12 months are our most critical testing months; should we in any way ~~disrupt~~ risk disrupting this for only 5 latencies for Thor/Titan and for a relatively small number of Atlas/Titan? by 374
2. System Test Duration of LAC, after 2nd stage arrives at launching stand has so remote a connection with design, specification, fabrication, etc. of Subsystem I, (being supervised by Rome Air Dev Center!) that and being performed by ^{another Div. division} ~~everybody~~ ~~being given to the~~ ~~argument~~ ~~for wanting~~ the we cannot understand the ~~argument~~ ~~for wanting~~ the other organization, in view of the clear ~~technical~~ disadvantages of the other organization. To be logical, one would be more concerned with Convin/locked & Douglas/locked problems of this sort, since ^{would one stop down to locked organizationally.} as Test Controller Convin or Douglas